







How to change front suspension strut on VW Passat 3C B6 Variant – replacement guide



**VIDEO TUTORIAL** 

### (i) Important!

This replacement procedure can be used for: VW PASSAT B6 (3C2) 2.0 TDI, VW PASSAT B6 (3C2) 2.0 TDI 4motion, VW PASSAT B6 Variant (3C5) 2.0 TDI, VW PASSAT B6 Variant (3C5) 2.0 TDI 4motion

The steps may slightly vary depending on the car design.

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### REPLACEMENT: SUSPENSION STRUT – PASSAT B6 3C VARIANT. TOOLS YOU'LL NEED:



- Wire brush
- WD-40 spray
- Brake cleaner
- Copper grease
- HEX bit no.H6.
- XZN socket bit # 14
- 12-point socket # 24
- Drive socket # 13
- Drive socket # 16
- Drive socket # 18
- Drive socket # 19
- Drive socket # 21

- Wheel impact socket #17
- Ratchet wrench
- Torque wrench
- Shock absorber socket
- Pin punch
- Tap wrench
- Clip removal tool
- Crow bar
- Hydraulic strut spring compressor
- Hydraulic transmission jack
- Fender cover
- Wheel chock

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### Replacement: suspension strut – VW Passat 3C5. Tip from AUTODOC experts:

- Both shock struts of the front suspension should be replaced simultaneously.
- The replacement procedure is identical for the left and right shock struts of the front suspension.
- All work should be done with the engine stopped.

### REPLACEMENT: SUSPENSION STRUT – PASSAT VARIANT B6. USE THE FOLLOWING PROCEDURE:

1



Open the bonnet.

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Use a fender protection cover to prevent damaging paintwork and plastic parts of the car.

3



Detach the windscreen washer nozzle hose. Use a clip removal tool.

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Remove the clips of the plastic cowl grille.

5



Raise the wiper plastic cowl grille.

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Clean the fasteners of the shock strut upper mount. Use a wire brush. Use WD-40 spray.

7



Loosen the upper fastener of the shock strut mount. Use a drive socket #13. Use a ratchet wrench.

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Secure the wheels with chocks.

9



Loosen the wheel hub bolt. Use drive 12-point socket #24. Use a tap wrench.

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Loosen the wheel mounting bolts. Use wheel impact socket #17.

11



Raise the front of the car and secure on supports.

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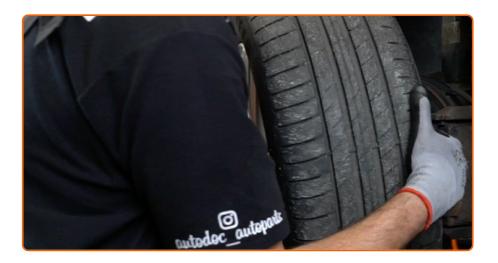


Unscrew the wheel bolts.

#### **AUTODOC** recommends:

 Important! Hold the wheel while unscrewing the fastening bolts. VW Passat B6 3C Variant

13



Remove the wheel.

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Clean the stabiliser link fasteners. Use a wire brush. Use WD-40 spray.

15



Unscrew the fastener connecting the stabilizer link to the shock strut. Use a drive socket #18. Use a ratchet wrench.

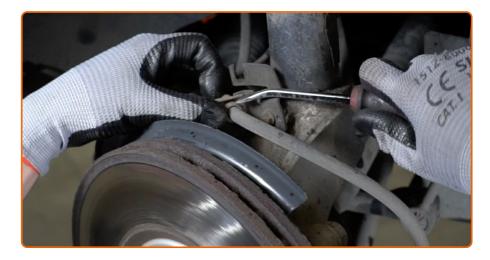
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Remove the stabilizer rod.

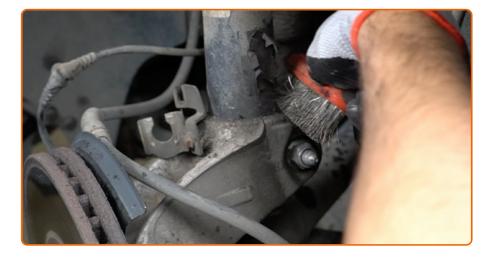
1/



Disconnect the wiring and the brake hose from the bracket on the shock strut. Use a crowbar.

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Clean the fasteners connecting the shock strut to the steering knuckle. Use a wire brush. Use WD-40 spray.

19



Unscrew the lower fastener connecting the shock strut to the steering knuckle. Use a drive socket #18. Use XZN #14. Use a tap wrench. Use a ratchet wrench.

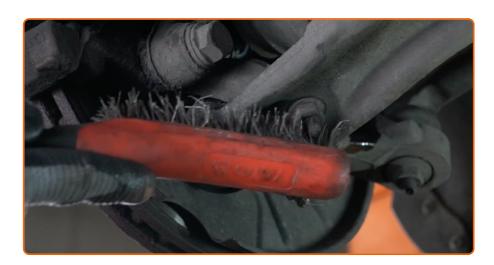
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Remove the fastening bolt. Use drive 12-point socket #24.

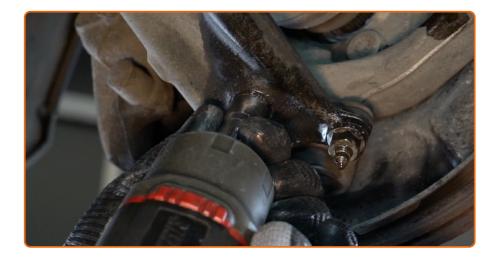
21



Clean all joints of the arm. Use a wire brush. Use WD-40 spray.

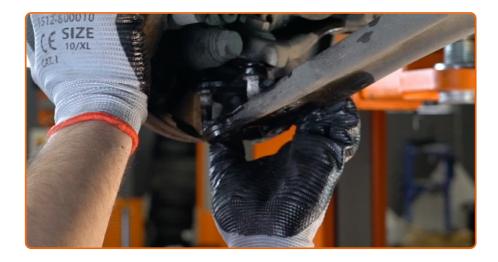
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Unscrew the fastener connecting the ball joint to the suspension control arm. Use a drive socket #16. Use a ratchet wrench.

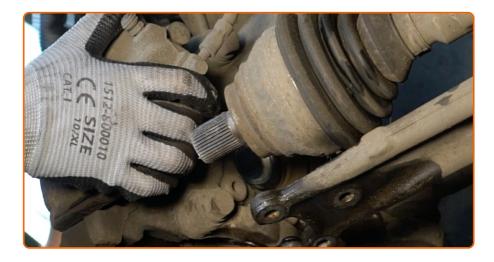
23



Disconnect the ball joint from the arm. Use a crowbar.

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Remove the drive shaft. Use a pin punch.

### Replacement: suspension strut – Passat 3C5. Tip:

 Make sure that the drive shaft is not unloaded (when the car is jacked).

25



Prop up the steering knuckle. Use a hydraulic transmission jack.

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Remove the fastening bolt.

27



Release the lower fastener connecting the shock strut to the steering knuckle. Use a special drive socket to remove the shock absorber. Use a ratchet wrench.

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Clean the fasteners connecting the shock strut to the steering knuckle. Use a wire brush. Use WD-40 spray.

29



Disconnect the steering knuckle from the shock absorber strut.

30

Unscrew the top fastening of the shock strut mount.

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### AUTODOC recommends:

 Important! Hold the suspension strut while unscrewing the fastening bolts. VW Passat Variant B6

31

Remove the suspension strut.

32



Set the shock absorber strut on the spring compressor tool.

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### Replacement: suspension strut – Passat B6 3C Variant. Tip from AUTODOC:

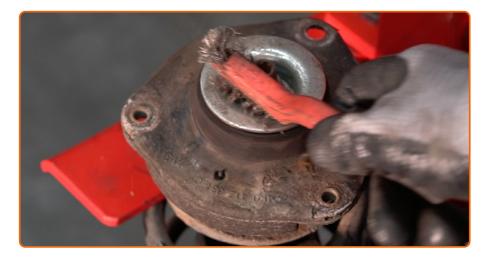
- Note that when using a spring compressor, spring coils need to be securely gripped, compressing the spring on the opposite sides.
- Ensure the correct position of the spring in the retainer.
- Make sure that the spring coils tightly entered the lock handles.

33



Compress the spring.

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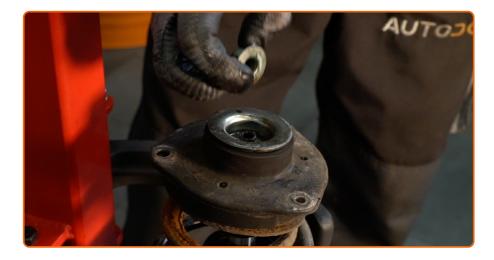
Treat the shock strut rod. Use a wire brush. Use WD-40 spray.

35



Remove the strut piston rod nut. Use HEX No.H6. Use a drive socket #21. Use a ratchet wrench.

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Remove the top strut mount.

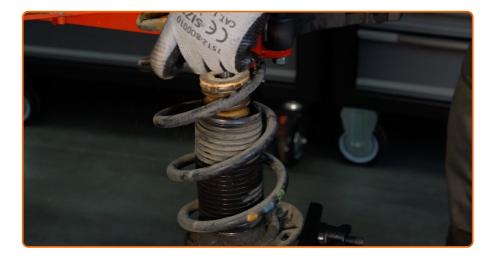
37



Release the coil spring.

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Remove the spring.

39



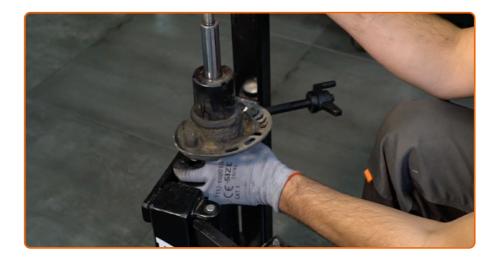
Remove the shock absorber dust cap and the bump stop.

### AUTODOC recommends:

 Replacement: suspension strut – VW Passat 3C5. Carefully inspect the mount, the boot, and the bump stop of the shock absorber. Replace if necessary.

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Remove the old shock absorber from the hydraulic coil spring compressor.

# Replacement: suspension strut – VW Passat 3C5. AUTODOC recommends:

 Before installing a new shock absorber you should pump it manually 3-5 times.

41



Install the new shock absorber on the hydraulic coil spring compressor.

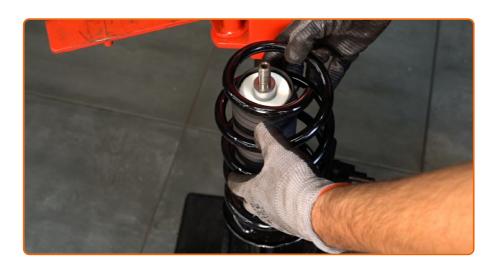
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Install the dust sleeve and the bump stop on the new shock absorber.

43



Install the spring on the shock absorber.

44

Compress the spring.

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Install the upper strut mount and the strut mount bearing.

46



Tighten the shock strut piston rod nut. Use a drive socket #19. Use HEX No.H6. Use a torque wrench. Tighten it to 60 Nm torque.

# Replacement: suspension strut – VW Passat 3C B6 Variant. AUTODOC experts recommend:

 Check to make sure the spring is positioned correctly. Avoid its misalignment.

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Treat the shock strut rod. Use copper grease.

48



Decompress the spring.

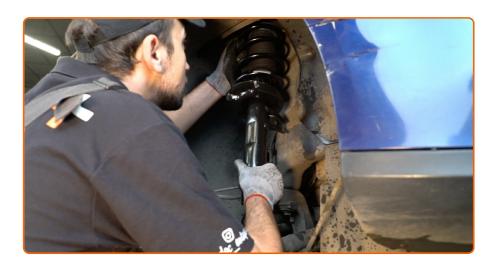
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Remove the assembled shock strut.

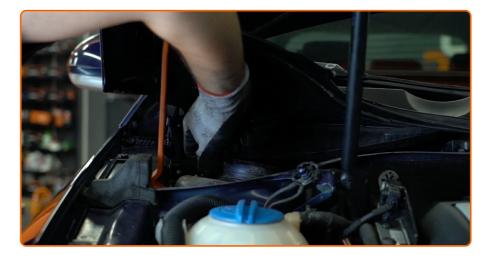
50



Install the shock strut into the wheel arch.

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Screw the top fastening of the shock strut mount. Do not tighten it.

# Replacement: suspension strut – Passat B6 3C Variant. Tip from AUTODOC:

 To avoid injuries, hold the shock strut when screwing the fastening bolts in.

52



Clean the mounting seats of the shock strut. Use a wire brush. Use WD-40 spray.

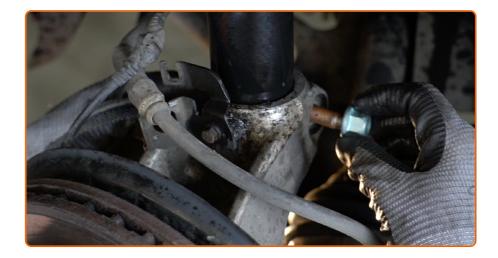
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Fix the shock absorber strut on the steering knuckle.

54



Install the fastening bolt.

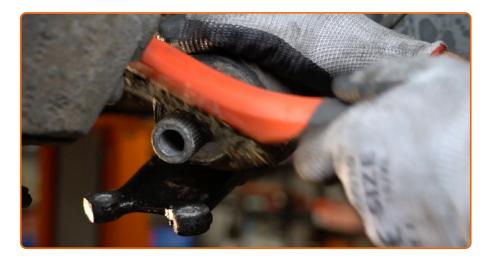
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Screw in the fastener that connects the shock strut to the steering knuckle. Use a drive socket #18. Use XZN #14. Use a ratchet wrench.

56



Clean the splines of the drive shaft CV joint. Use a wire brush. Use WD-40 spray.

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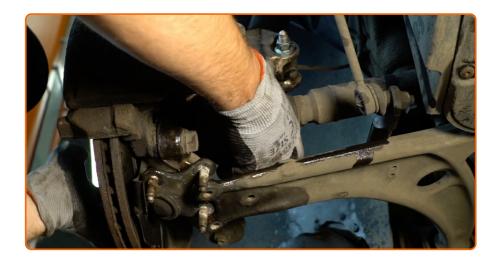


Remove the support from under the steering knuckle.

#### **AUTODOC** recommends:

 Replacement: suspension strut – Passat Variant B6. Lower the transmission jack smoothly, without jerks, to avoid damaging components and mechanisms.

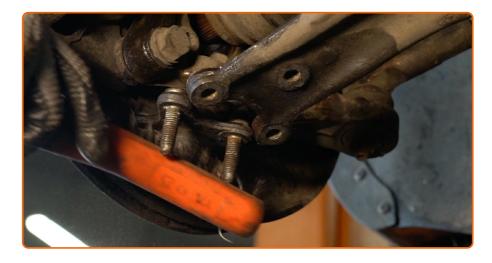
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Mount the drive shaft into the wheel hub.

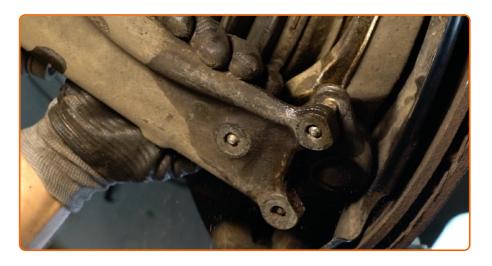
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Clean the mounting seats and the thread of the suspension arm. Use a wire brush. Use WD-40 spray.

60



Attach the ball joint to the control arm.

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Tighten the ball joint fastener. Use a drive socket #16. Use a torque wrench. Tighten it to 55 Nm torque.

62



Tighten the lower fasteners connecting the shock strut to the steering knuckle. Use XZN #14. Use a drive socket #18. Use a ratchet wrench. Use a torque wrench. Tighten it to 90 Nm torque.

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Connect the fastener of the ABS sensor cable to the shock absorber strut. Fasten the brake hose on the strut. Use a crowbar.

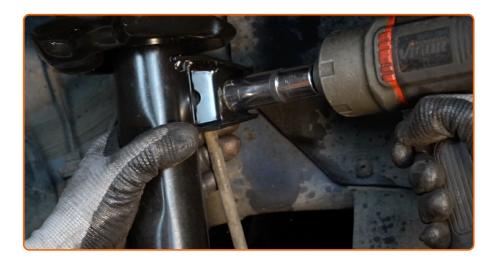
64



Install the transverse stabilizer link.

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Tighten the fastener connecting the stabilizer link to the shock strut. Use a drive socket #18. Use a torque wrench. Tighten it to 60 Nm torque.

66



Install and tighten the drive shaft bolt. Use drive 12-point socket #24. Use a ratchet wrench.

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Treat all joints of the arm. Treat the shock strut fasteners. Use copper grease.

68



Treat the surface where the brake disc contacts the wheel rim. Use copper grease.

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Clean the brake disk surface. Use a brake cleaner.

# Replacement: suspension strut – VW Passat 3C5. Tip from AUTODOC experts:

• After applying the spray, wait a few minutes.

70



Install the wheel.

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### Replacement: suspension strut – Passat Variant B6. Tip:

 To avoid injury, hold up the wheel when screwing in the fastening bolts.

71



Screw in the wheel bolts. Use wheel impact socket #17.

72



Lower the car.

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Tighten the upper fastener of the shock absorber strut mount. Use a drive socket #13. Use a torque wrench. Tighten it to 40 Nm torque.

74

Treat the fasteners of the shock strut mount. Use copper grease.

75



Install and secure the cowl grille.

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Install the fasteners of the wiper plastic cowl grille.

77



Attach the windscreen washer nozzle hose.

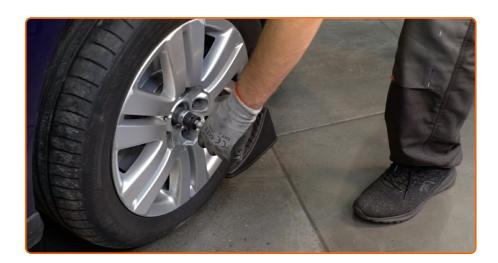
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Tighten the wheel bolts using a criss-cross pattern. Use wheel impact socket #17. Use a torque wrench. Tighten it to 120 Nm torque.

79



Tighten the bolt connecting the drive shaft to the wheel hub. Use drive 12-point socket #24. Use a torque wrench. Tighten it to 155 Nm torque.

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Remove the fender protection cover.

81



Close the hood.

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Remove the jacks and chocks.

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## DID YOU FIND THESE INSTRUCTIONS HELPFUL?

YES

NO

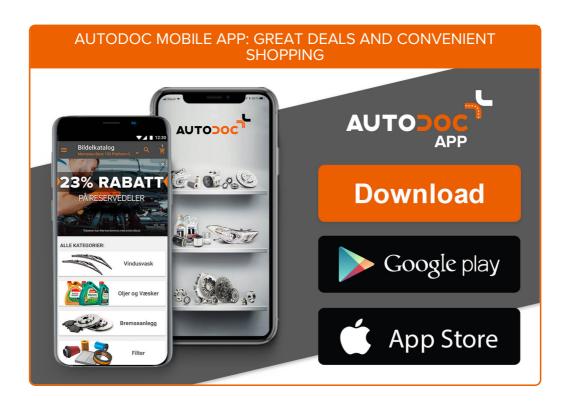


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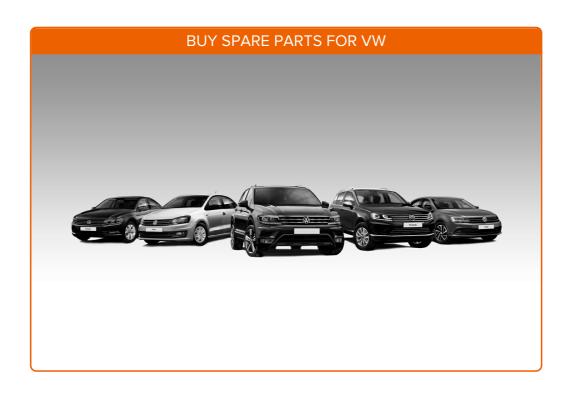
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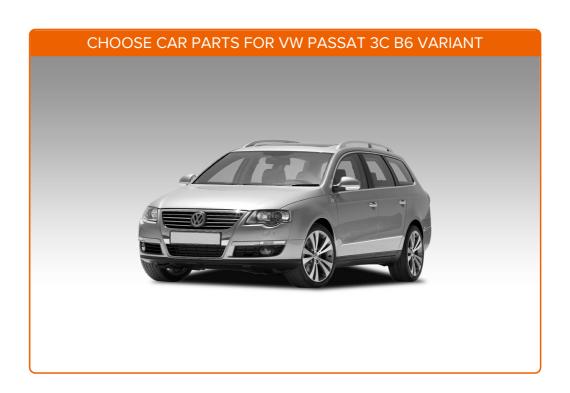






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